

IFW image

A circular black and white stamp. The text "OFFICE" is at the top, "PATENT & TRADEMARK OFFICE" is at the bottom, and "FEB 16 2007" is in the center.

Attorney
Docket: 31570

Sir:

Enclosed is a PTO Form 1449 which lists citations which may be material to the patentability and examination of the above identified application. Also enclosed are copies of the references cited. These are submitted in compliance with the duty of disclosure defined in 37 CFR 1.56. The Examiner is requested to make these citations of official record in this application.

This Information Disclosure Statement under 37 CFR 1.56 is not to be construed as a representation that a search has been made, that additional matter which is material to the examination of this application does not exist, or that any or more of these citations constitutes prior art.

Respectfully submitted,

Martin O. Moynihan

Martin D. Moynihan
Registration No. 40,338

Dated: February 14, 2007

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.**
SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/568,707
				Filing Date	December 14, 2006
				First Named Inventor	Yosef YARDEN et al
				Group Art Unit	1648
				Examiner Name	Not yet Assigned
Sheet	2	Of	10	Attorney Docket Number	31570
OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS					
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.			T ²
	2	Aizawa et al. "Kinesin Family in Murine Central Nervous System", The Journal of Cell Biology, 119(5): 1287-1296, 1992.			
	3	Babst et al. "Mammalian Tumor Susceptibility Gene 101 (TSG101) and the Yeast Homologue, Vps23p, Both Function in Late Endosomal Trafficking", Traffic, 1: 248-258, 2000.			
	4	Clavel et al. "Isolation of A New Human Reterovirus From West African Patients With AIDS", Science, 233(4761): 343-346, 1986.			
	5	Cocchi et al. "Identification of RANTES, MIP-1a<e/b>, and MIP-1b as the Major HIV-Suppressive Factors Produced by CD8⁺ T Cells", Science, 270(5243): 1811-1815, 1995.			
	6	Cole et al. "The EBV-Hybridoma Technique and Its Application to Human Lung Cancer", Monoclonal Antibodies and Cancer Therapy, P.77-96, 1985.			
	7	Coruzzi et al. "Tissue-Specific and Light-Regulated Expression of A Pea Nuclear Gene Encoding the Small Subunit of Ribulose-1,5-Bisphosphate Carboxylase", The EMBO Journal, 3: 1671-1680, 1984.			
	8	Cullen "RNA Interference: Antiviral Defense and Genetic Tool", Nature Immunology, 3(7): 597-599, 2002.			
	9	Daar et al. "High Concentrations of Recombinant Soluble CD4 Are Required to Neutralize Primary Human Immunodeficiency Virus Type 1 Isolates", Proc. Natl. Acad. Sci. USA, 87: 6574-6578, 1990.			
	10	Davies et al. "Selection of Specific Phage-Display Antibodies Using Libraries Derived From Chicken Immunoglobulin Genes", Journal of Immunological Methods, 186: 125-135, 1995.			
	11	Demirov et al. "Overexpression of the N-Terminal Domain of TSG101 Inhibits HIV-1 Budding by Blocking Late Domain Function", Proc. Natl. Acad. Sci. USA, 99(2): 955-960, 2002.			
	12	Deng et al. "Basis for Selection of Improved Carbohydrate-Binding Single-Chain Antibodies From Synthetic Gene Libraries", Proc. Natl. Acad. Sci. USA, 92: 4992-4996, 1995.			
	13	Deng et al. "Selection of Antibody Single-Chain Variable Fragments With Improved Carbohydrate Binding by Phage Display", The Journal of Biological Chemistry, 269(13): 9533-9538, 1994.			
	14	Edlund et al. "Cell-Specific Expression of the Rat Insulin Gene: Evidence for Role of Two Distinct 5 ^{ ı%o} Flanking Elements", Science, 230(4728): 912-916, 1985.			
	15	Englisch et al. "Chemically Modified Oligonucleotides as Probes and Inhbitors", Angewandte Chemie, International Edition in English, 30(6): 613-722, 1991.			

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3).

⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. this collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.

SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/568,707
				Filing Date	December 14, 2006
				First Named Inventor	Yosef YARDEN et al
				Group Art Unit	1648
				Examiner Name	Not yet Assigned
Sheet	3	Of	10	Attorney Docket Number	31570
OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS					
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.			T ²
	16	Erickson "Design and Structure of Symmetry-Based Inhibitors of HIV-1 Protease", Perspectives in Drug Discovery and Design, 1: 109-128, 1993.			
	17	Erickson et al. "Design, Activity, and 2.8 A Crystal Structure of A C₂ Symmetric Inhibitor Complexed to HIV-1 Protease", Science, 249(4968): 527-533, 1990.			
	18	Fingl et al. ""Introduction. General Principles", The Pharmacological Basis of Therapeutics, Sec.I(Chap.1): 1-46, 1975.			
	19	Fishwild et al. "High-Avidity Human IgG? Monoclonal Antibodies From A Novel Strain of Minilocus Transgenic Mice", Nature Biotechnology, 14: 845-851, 1996.			
	20	Freed et al. "Viral Late Domains", Journal of Virology, 76(10): 4679-4687, 2002.			
	21	Gallo et al. "Frequent Detection and isolation of Cytopathic Retroviruses (HTLV-III) From Patients With AIDS and at Risk for AIDS", Science, 224(4648): 500-503, 1984.			
	22	Garrus et al. "Tsg101 and the Vacuolar Protein Sorting Pathway Are Essential for HIV-1 Budding", Cell, 107: 55-65, 2001.			
	23	Gewirtz "Oligonucleotide Therapeutics: Clothing the Emperor", Current Opinion in Molecular Therapeutics, 1(3): 297-306, 1999.			
	24	Giebel et al. "Screening of Cyclic Peptide Phage Libraries Identifies Ligands That Bind Streptavidin With High Affinities", Biochemistry, 34: 15430-15435, 1995.			
	25	Goila-Gaur et al. "Defects in Human Immunodeficiency Virus Budding and Endosomal Sorting Induced by TSG101 Overexpression", Journal of Virology, 77(11): 6507-6519, 2003.			
	26	Grammatikakis et al. "P50cdc37 Acting in Concert With Hsp90 Is Required for Raf-1 Function", Molecular and Cellular Biology, 19(3): 1661-1672, 1999.			
	27	Gurley et al. "Upstream Sequences Required for Efficient Expression of A Soybean Heat Shock Gene", Molecular and Cellular Biology, 6(2): 559-565, 1986.			
	28	Guyader et al. "Genome Organization and Transcription and Transactivation of the Human Immunodeficiency Virus Type 2", Nature, 326: 662-669, 1987.			
	29	Hammond et al. "Post-Transcriptional Gene Silencing by Double-Stranded RNA", Nature Reviews: Genetics, 2: 110-119, 2001.			
	30	Hermida-Matsumoto et al. "Localization of Human Immunodeficiency Virus Type 1 Gag and Env at the Plasma Membrane by Confocal Imaging", Journal of Virology, 74(18): 8670-8679, 2000.			
	31	Hicke "Protein Regulation by Monobiquitin", Nature Reviews: Molecular Cell Biology, 2: 195-201, 2001.			
	32	Hoogenboom et al. "By-Passing Immunisation. Human Antibodies From Synthetic Repertoires of Germline V _H Gene Segments Rearranged In Vitro", Journal of Molecular Biology, 227: 381-388, 1992.			

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3).

⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. this collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.

SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>			Complete if Known		
			Application Number	10/568,707	
			Filing Date	December 14, 2006	
			First Named Inventor	Yosef YARDEN et al	
			Group Art Unit	1648	
			Examiner Name	Not yet Assigned	
Sheet	4	Of	10	Attorney Docket Number	31570
OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS					
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.			T ²
	33	Hutv?gner et al. "RNAi: Nature Abhors A Double-Strand", Current Opinion in Genetics & Development, 12: 225-232, 2002.			
	34	Inbar et al. "Localization of Antibody-Combining Sites Within the Variable Portions of Heavy and Light Chains", Proc. Natl. Acad. Sci. USA, 69(9): 2659-2662, 1972.			
	35	Joazeiro et al. "The Tyrosine Kinase Negative Regulator C-Cbl as A RING-Type, E2-Dependent Ubiquitin-Protein Ligase", Science, 286(5438): 309-312, 1999.			
	36	Joazeiro et al. "RING Finger Proteins: Mediators of Ubiquitin Ligase Activity", Cell, 102: 549-552, 2000.			
	37	Jones et al. "Replacing the Complementarity-Determining Regions in A Human Antibody With Those From A Mouse", Nature, 321: 522-525, 1986.			
	38	Jones et al. "Improved Methods for Building Protein Models in Electron Density Maps and the Location of Errors in These Models", Acta Crystallographica, A 47(Part 2): 110-119, 1991.			
	39	Kahn et al. "The Safety and Pharmacokinetics of Recombinant Soluble CD4 (rCD4) in Subjects With the Aquired Immunodeficiency Syndrome (AIDS) and AIDS-Related Complex", Annals of Internal Medicine, 112: 254-261, 1990.			
	40	Katzmann et al. "Ubiquitin-Dependent Sorting Into the Multivesicular Body Pathway Requires the Function oa A Conserved Endosomal Protein Sorting Complex, ESCRT-I", Cell, 106: 145-155, 2001.			
	41	Katzmann et al. "Receptor Downregulation and Multivesicular-Body Sorting", Nature Reviews: Molecular Cell Biology, 3: 893-905, 2002.			
	42	Khachigian "DNAzymes: Cutting A Path to A New Class of Therapeutics", Current Opinion in Molecular Therapeutics, 4(2): 119-121, 2002.			
	43	Kikonyogo et al. "Proteins Related to the Nedd4 Family of Ubiquitin Protein Ligases Interact With the L Domain of Rous Sarcoma Virus and Are Required for Gag Budding From Cells", Proc. Natl. Acad. Sci. USA, 98(20): 11199-11204, 2001.			
	44	Kraulis "MOLSCRIPT: A Program to Produce Both Detailed and Schematic Plots of Protein Structures", Journal of Applied Crystallography, 24: 946-950, 1991.			
	45	Kronenwett et al. "Oligodeoxyribonucleotide Uptake in Primary Human Hematopoietic Cells Is Enhanced by Cationic Lipids and Depends on the Hematopoietic Cell Subset", Blood, 91(3): 852-862, 1998.			
	46	Lam et al. "Rational Design of Potent, Bioavailable, Nonpeptide Cyclic Ureas as HIV Protease Inhibitors", Science, 263(5145): 380-384, 1994.			
	47	Lange "Triple Combinations: Present and Future", Journal of Acquired Immune Deficiency Syndromes and Human Retrovirology, 10(Suppl.1): S77-S82, 1995.			
	48	Larrick et al. "PCR Amplification of Antibody Genes", Methods: A Companion to Methods in Enzymology, 2(2): 106-110, 1991.			

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3).

⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. this collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.

SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/568,707
				Filing Date	December 14, 2006
				First Named Inventor	Yosef YARDEN et al
				Group Art Unit	1648
				Examiner Name	Not yet Assigned
Sheet	5	Of	10	Attorney Docket Number	31570
OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS					
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.			T ²
	49	Lavigne et al. "Enhanced Antisense Inhibitor of Human Immunodeficiency Virus Type 1 in Cell Cultures by DLS Delivery System", Biochemical and Biophysical Research Communications, 237: 566-571, 1997.			
	50	Li et al. "Tsg101: A Novel Tumor Susceptibility Gene Isolated by Controlled Homozygous Functional Knockout of Allelic Loci in Mammalian Cells", Cell, 85: 319-329, 1996.			
	51	Li et al. "The TSG101 Tumor Susceptibility Gene Is Located in Chromosome 11 Band P15 and Is Mutated in Human Breast Cancer", Cell, 88: 143-154, 1997.			
	52	Lonberg et al. "Human Antibodies From Transgenic Mice", International Reviews of Immunology, 13: 65-93, 1995.			
	53	Lonberg et al. "Antigen-Specific Human Antibodies From Mice Comprising Four Distinct Genetic Modifications", Nature, 368: 856-859, 1994.			
	54	Luft "Clinical Implications. Making Sense Out of Antisense Oligodeoxynucleotide Delivery: Getting There Is Half the Fun", Journal of Molecular Medicine, 76: 75-76, 1998.			
	55	Marks et al. "By-Passing Immunization: Building High Affinity Human Antibodies by Chain Shuffling", Bio/Technology, 10: 779-783, 1992.			
	56	Marks et al. "By-Passing Immunization. Human Antibodies From V-Gene Libraries Displayed on Phage", Journal of Molecular Biology, 222: 581-597, 1991.			
	57	Martin-Serrano et al. "A Bipartite Late-Budding Domain in Human Immunodeficiency Virus Type 1", Journal of Virology, 77(22): 12373-12377, 2003.			
	58	Martin-Serrano et al. "Role of ESCRT-I in Retroviral Budding", Journal of Virology, 77(8): 4794-4804, 2003.			
	59	Martin-Serrano et al. "HIV-1 and Ebola Virus Encode Small Peptide Motifs That Recruit Tsg101 to Sites of Particle Assembly to Facilitate Egress", Nature Medicine, 7(12): 1313-1319, 2001.			
	60	Matveeva et al. "Prediction of Antisense Oligonucleotide Efficacy by In Vitro Methods", Nature Biotechnology, 16: 1374-1375, 1998.			
	61	Mauro et al. "STI571: A Paradigm of new Agents for Cancer Therapeutics", Journal of Clinical Oncology, 20(1): 325-334, 2002.			
	62	Mitsuya et al. "Molecular Targets for AIDS Therapy", Science, 249(4976): 1533-1544, 1990.			
	63	Mitsuya et al. "Targeted Therapy of Human Immunodeficiency Virus-Related Disease", The FASEB Journal, 5: 2369-2381, 1991.			
	64	Morrison "Success in Specification", Nature, 368: 812-813, 1994.			
	65	Myers et al. "Tsg101, An Inactive Homologue of Ubiquitin Ligase E2, Interacts Specifically With Human Immunodeficiency Virus Type 2 Gag Polyprotein and Results in Increased Levels of Ubiquitinated Gag", Journal of Virology, 76(22): 11226-11235, 2002.			

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3).

⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/568,707
				Filing Date	December 14, 2006
				First Named Inventor	Yosef YARDEN et al
				Group Art Unit	1648
				Examiner Name	Not yet Assigned
Sheet	6	Of	10	Attorney Docket Number	31570
OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS					
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.			T ²
	66	Naldini et al. "Efficient Transfer, Integration, and Sustained Long-Term Expression of the Transgene in Adult Rat Brains Injected With A Lentiviral Vector", Proc. Natl. Acad. Sci. USA, 93: 11382-11388, 1996.			
	67	Neuberger "Generating High-Avidity Human Mabs in Mice", Nature Biotechnology, 14: 826, 1996.			
	68	O'Bryan et al. "Mitogenesis and Endocytosis: What's at the INTERSECTIoN?", Oncogene, 20: 6300-6308, 2001.			
	69	Ott et al. "Retroviruses Have Differing Requirements for Proteasome Function in the Budding Process", Journal of Virology, 77(6): 3384-3393, 2003.			
	70	Pack et al. "Improved Bivalent Miniantibodies, With Identical Avidity as Whole Antibodies, Produced by High Cell Density Fermentation of Escherichia Coli", Bio/Technology, 11: 1271-1277, 1993.			
	71	Perelson et al. "HIV-1 Dynamics In Vivo: Virion Clearance Rate, Infected Cell Life-Span, and Viral Generation Time", Science, 271(5255): 1582-1586, 1996.			
	72	Pinkert et al. "An Albumin Enhancer Located 10 Kb Upstream Functions Along With Its Promoter to Direct Efficient, Liver-Specific Expression in Transgenic Mice", Genes & Development, 1: 268-276, 1987.			
	73	Pornillos et al. "Mechanisms of Enveloped RNA Virus Budding", Trends in Cell Biology, 12(12): 569-579, 2002.			
	74	Pornillos et al. "Structure of the Tsg101 UEV Domain in Complex With the PTAP Motif of the HIV-1 P6 Protein", Nature Structural Biology, 9(11): 812-817, 2002.			
	75	Pornillos et al. "Structure and Functional Interactions of the Tsg101 UEV Domain", The EMBO Journal, 21(10): 2397-2406, 2002.			
	76	Porter "The Hydrolysis of Rabbit ?-Globulin and Antibodies With Crystalline Papain", Biochemical Journal, 73: 119-126, 1959.			
	77	Presta "Antibody Engineering", Current Opinion in Structural Biology, 2: 593-596, 1992.			
	78	Puffer et al. "Equine Infectious Anemia Virus Utilizes as YXXL Motif Within the Late Assembly Domain of the Gag P9 Protein", Journal of Virology, 71(9): 6541-6546, 1997.			
	79	Rajur et al. "Covalent Protein-Oligonucleotide Conjugates for Efficient Delivery of Antisense Molecules", Bioconjugate Chemistry, 8: 935-940, 1997.			
	80	Riechmann et al. "Reshaping Human Antibodies for Therapy", Nature, 332: 323-329, 1988.			
	81	Davidkova et al. "Mechanism of Action of Antisense Oligodeoxynucleotides", Antisense Research and Applications, CRC Press, P.276-278, 1993.			

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3).

⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. this collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.

SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/568,707
				Filing Date	December 14, 2006
				First Named Inventor	Yosef YARDEN et al
				Group Art Unit	1648
				Examiner Name	Not yet Assigned
Sheet	7	Of	10	Attorney Docket Number	31570
OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS					
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.			T ²
	82	Davidkova et al. "Pharmacological Inhibition of Dopaminergic", Antisense Research and Applications, CRC Press, P.289-302, 1993.			
	83	Santoro et al. "A General Purpose RNA-Cleaving DNA Enzyme", Proc. Natl. Acad. Sci. USA, 94: 4262-4266, 1997.			
	84	Schooley et al. "Recombinant Soluble CD4 Therapy in Patients With the Acquired Immunodeficiency Syndrome (AIDS) and AIDS-Related Complex", Annals of Internal Medicine, 112: 247-253, 1990.			
	85	Schubert et al. "Augmentation of Virus Secretion by the Human Immunodeficiency Virus Type 1 Vpu Protein Is Cell Type Independent and Occurs in Cultured Human Primary Macrophages and Lymphocytes", Journal of Virology, 69(12): 7699-7711, 1995.			
	86	Schubert et al. "Proteasome Inhibition Interferes With Gag Polyprotein Processing, Release, and Maturation of HIV-1 and HIV-2", Proc. Natl. Acad. Sci. USA, 97(24): 13057-13062, 2000.			
	87	Sharp "RNA Interference - 2001", Genes & Development, 15: 485-490, 2001.			
	88	Smith et al. "Blocking of HIV-1 Infectivity by A Soluble, Secreted Form of the CD4 Antigen", Science, 238(4834): 1704-1707, 1987.			
	89	Studier et al. "Use of T7 RNA Polymerase to Direct Expression of Cloned Genes", Methods in Enzymology, 185(Chap.6): 60-89, 1990.			
	90	Takamatsu et al. "Expression of Bacterial Chloaramphenicol Acetyltransferase Gene in Tobacco Plants Mediated by TMV-RNA", The EMBO Journal, 6(2): 307-311, 1987.			
	91	Teich et al. "Pathogenesis of Lentiviruses", RNA Tumor Viruses, CSH-Press, Chap.14: 949-956, 1984.			
	92	Tonkinson et al. "Antisense Oligodeoxynucleotides as Clinical Therapeutics Agents", Cancer Investigation, 14(1): 54-65, 1996.			
	93	Tuschl "RNA Interference and Small Interfering RNAs", CHEMBIOCHEM, 2: 239-245, 2001.			
	94	Tzahar et al. "A Hierarchical Network of Interreceptor Interactions Determines Signal Transduction by Neu Differentiation Factor/Neuregulin and Epidermal Growth Factor", Molecular and Cellular Biology, 16(10): 5276-5287, 1996.			
	95	Uno et al. "Antisense-Mediated Suppression of Human Heparanase Gene Expression Inhibits Pleural Dissemination of Human Cancer Cells", Cancer Research, 61: 7855-7860, 2001.			
	96	Varmus "Retroviruses", Science, 240(4858): 1427-1435, 1988.			
	97	Verhoeven et al. "Reshaping Human Antibodies: Grafting An Antilysozyme Activity", Science, 239(4847): 1534-1536, 1988.			

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3).

⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. this collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.

SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/568,707
				Filing Date	December 14, 2006
				First Named Inventor	Yosef YARDEN et al
				Group Art Unit	1648
				Examiner Name	Not yet Assigned
Sheet	8	Of	10	Attorney Docket Number	31570
OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS					
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.			T ²
	98	VerPlank et al. "Tsg101, A Homologue of Ubiquitin-Conjugating (E2) Enzymes, Binds the L Domain in HIV Type 1 Pr55 Gag", Proc. Natl. Acad. Sci. USA, 98(14): 7724-7729, 2001.			
	99	Walton et al. "Prediction of Antisense Oligonucleotide Binding Affinity to A Structured RNA Target", Biotechnology and Bioengineering, 65(1): 1-9, 1999.			
	100	Wang et al. "Low Frequency of TSG101/CC2 Gene Alterations in Invasive Human Breast Cancers", Oncogene, 16: 677-679, 1998.			
	101	Waterman et al. "Molecular Mechanisms Underlying Endocytosis and Sorting of ErbB Receptor Tyrosine Kinases", FEBS Letters, 490: 142-152, 2001.			
	102	Waterman et al. "The RING Finger of C-Cbl Mediates Desensitization of the Epidermal Growth Factor Receptor", The Journal of Biological Chemistry, 274(32): 22151-22154, 1999.			
	103	Rogers et al. "Gene Transfer in Plants: Production of Transformed Plants Using Ti Plasmid Vectors", Methods for Plant Molecular Biology, Academic Press, Sec.VIII(Chap.26-28): 423-463, 1988.			
	104	Weitzel et al. "Molecular Genetic Changes Associated With Ovarian Cancer", Gynecologic Oncology, 55: 245-252, 1994.			
	105	Welch etc. "Ribozyme Gene Therapy for Hepatitis C Virus Infection", Clinical and Diagnostic Virology, 10: 163-171, 1998.			
	106	Welch et al. "Expression of Ribozymes in Gene Transfer Systems to Modulate Target RNA Levels", Current Opinion in Biotechnology, 9: 486-496, 1998.			
	107	Whitlow et al. "Single-Chain Fv Proteins and Their Fusion Proteins", Methods: A Companion to Methods in Enzymology, 2(2): 97-105, 1991.			
	108	Wills et al. "Form, Function, and Use of Retroviral Gag Proteins", AIDS, 5: 639-654, 1991.			
	109	Wilson et al. "A Genetic Method for Defining DNA-Binding Domains: Application to the Nuclear Receptor NGFI-B", Proc. Natl. Acad. Sci. USA, 90: 9186-9190, 1993.			
	110	Winoto et al. "A Novel, Inducible and T Cell-Specific Enhancer Located at the 3' End of the T Cell Receptor Alpha Locus", The EMBO Journal, 8(3): 729-733, 1989.			
	111	Wlodawer et al. "Structure-Based Inhibitors of HIV-1 Protease", Annual Reviews of Biochemistry, 62: 543-585, 1993.			
	112	Yarchoan et al. Phase I Study of the Administration of Recombinant Soluble CD4 (rCD4) by Continuous Infusion to Patients With AIDS or ARC", Proceedings of the 5th International Conference on AIDS, Poster Session, Basic Research, M.C.P.137, P.564, 1989. Abstract.			
	113	Young "The Three-Dimensional Structures of A Polysaccharide Binding Antibody to Cryptococcus Neoformans and Its Complex With A Phage Display Library: Implications for the Identification of Peptide Mimotopes", Journal of Molecular Biology, 274: 622-634, 1997.			

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3).

⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. this collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/568,707
				Filing Date	December 14, 2006
				First Named Inventor	Yosef YARDEN et al
				Group Art Unit	1648
				Examiner Name	Not yet Assigned
Sheet	9	Of	10	Attorney Docket Number	31570
OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS					
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.			T ²
	114	Lai et al. "Differentiation of Hdm2-Mediated P53 Ubiquitination and Hdm2 Autoubiquitination Activity by Small Molecular Weight Inhibitors", Proc. Natl. Acad. Sci. USA, 99(23): 14734-14739, 2002.			
	115	Aoki et al. "In Vivo Transfer Efficiency of Antisense Oligonucleotides Into the Myocardium Using HVJ-Liposome Method", Biochemical and Biophysical Research Communications, 231: 540-545, 1997.			
	116	Jones et al. "Current Trends in Molecular Recognition and Bioseparation", Journal of Chromatography A, 707: 3-22, 1995.			
	117	Banerji et al. "A Lymphocyte-Specific Cellular Enhancer Is Located Downstream of the Joining Region in Immunoglobulin Heavy Chain Genes", Cell, 33: 729-740, 1983.			
	118	Barre-Sinoussi et al. "Isolation of A T-Lymphotropic Retrovirus From A Patient at Risk for Acquired Immune Deficiency Syndrome (AIDS)", Science, 220(4599): 868-871, 1983.			
	119	Bernstein et al. "Role for A Bidentate Ribonuclease in the Initiation Step of RNA Interference", Nature, 409: 363-366, 2001.			
	120	Bird et al. "Single-Chain Antigen-Binding Proteins", Science, 242(4877): 423-426, 1988.			
	121	Bishop et al. "TSG101/Mammalian VPS23 and Mammalian VPS28 Interact Directly and Are Recruited to VPS4-Induced Endosomes", The Journal of Biological Chemistry, 276(15): 11735-11742, 2001.			
	122	Bitter et al. "Expression and Secretion Vectors for Yeast", Methods in Enzymology, 153(Chap.33): 516-544, 1987.			
	123	Blazevic et al. "Helper and Cytotoxic T Cell Responses of HIV Type 1-Infected Individuals to Synthetic Peptides of HIV Type 1 Rev", AIDS Research and Human Retroviruses, 11(11): 1335-1342, 1995.			
	124	Boerner et al. "Production of Antigen-Specific Human Monoclonal Antibodies From In Vitro-Primed Human Splenocytes", The Journal of Immunology, 147(1): 86-95, 1991.			
	125	Brantl "Antsense-RNA Regulation and RNA Interference", Biochimica et Biophysica Acta, 1575: 15-25, 2002.			
	126	Breaker et al. "A DNA Enzyme With Mg ²⁺ -Dependent RNA Phosphoesterase Activity", Chemistry & Biology, 2: 655-660, 1995.			
	127	Brisson et al. "Expression of A Bacterial Gene in Plants by Using A Viral Vector", Nature, 310: 511-514, 1984.			

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3).

⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. this collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.

SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

Signature		Considered	

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. this collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.

SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/568,707
				Filing Date	December 14, 2006
				First Named Inventor	Yosef YARDEN et al
				Group Art Unit	1648
				Examiner Name	Not yet Assigned
Sheet	8	Of	10	Attorney Docket Number	31570
OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS					
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.			T ²
	98	VerPlank et al. "Tsg101, A Homologue of Ubiquitin-Conjugating (E2) Enzymes, Binds the L Domain in HIV Type 1 Pr55 Gag", Proc. Natl. Acad. Sci. USA, 98(14): 7724-7729, 2001.			
	99	Walton et al. "Prediction of Antisense Oligonucleotide Binding Affinity to A Structured RNA Target", Biotechnology and Bioengineering, 65(1): 1-9, 1999.			
	100	Wang et al. "Low Frequency of TSG101/CC2 Gene Alterations in Invasive Human Breast Cancers", Oncogene, 16: 677-679, 1998.			
	101	Waterman et al. "Molecular Mechanisms Underlying Endocytosis and Sorting of ErbB Receptor Tyrosine Kinases", FEBS Letters, 490: 142-152, 2001.			
	102	Waterman et al. "The RING Finger of C-Cbl Mediates Desensitization of the Epidermal Growth Factor Receptor", The Journal of Biological Chemistry, 274(32): 22151-22154, 1999.			
	103	Rogers et al. "Gene Transfer in Plants: Production of Transformed Plants Using Ti Plasmid Vectors", Methods for Plant Molecular Biology, Academic Press, Sec.VIII(Chap.26-28): 423-463, 1988.			
	104	Weitzel et al. "Molecular Genetic Changes Associated With Ovarian Cancer", Gynecologic Oncology, 55: 245-252, 1994.			
	105	Welch etc. "Ribozyme Gene Therapy for Hepatitis C Virus Infection", Clinical and Diagnostic Virology, 10: 163-171, 1998.			
	106	Welch et al. "Expression of Ribozymes in Gene Transfer Systems to Modulate Target RNA Levels", Current Opinion in Biotechnology, 9: 486-496, 1998.			
	107	Whitlow et al. "Single-Chain Fv Proteins and Their Fusion Proteins", Methods: A Companion to Methods in Enzymology, 2(2): 97-105, 1991.			
	108	Wills et al. "Form, Function, and Use of Retroviral Gag Proteins", AIDS, 5: 639-654, 1991.			
	109	Wilson et al. "A Genetic Method for Defining DNA-Binding Domains: Application to the Nuclear Receptor NGFI-B", Proc. Natl. Acad. Sci. USA, 90: 9186-9190, 1993.			
	110	Winoto et al. "A Novel, Inducible and T Cell-Specific Enhancer Located at the 3' End of the T Cell Receptor Alpha Locus", The EMBO Journal, 8(3): 729-733, 1989.			
	111	Wlodawer et al. "Structure-Based Inhibitors of HIV-1 Protease", Annual Reviews of Biochemistry, 62: 543-585, 1993.			
	112	Yarchoan et al. Phase I Study of the Administration of Recombinant Soluble CD4 (rCD4) by Continuous Infusion to Patients With AIDS or ARC", Proceedings of the 5th International Conference on AIDS, Poster Session, Basic Research, M.C.P.137, P.564, 1989. Abstract.			
	113	Young "The Three-Dimensional Structures of A Polysaccharide Binding Antibody to Cryptococcus Neoformans and Its Complex With A Phage Display Library: Implications for the Identification of Peptide Mimotopes", Journal of Molecular Biology, 274: 622-634, 1997.			

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw through citation if not in conformance and not considered. Include copy of copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3).

⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. this collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office,